Appl. No. 10/643,312
Amdt. dated December 29, 2005
Reply to Office Action of September 1, 2005

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1.   1.   (Currently amended): A disk control system that receives a process

2   command for writing or reading of data from an information processing device, and performs a

3   write or read process of data with respect to a logical device corresponding to a logical unit

4   specified by ~~that~~ said process command, comprising:

5   means for managing, ~~as units,~~ at least one logical ~~devices~~device, ~~which are~~ said

6   logical device being a logical storage ~~regions~~region that ~~have~~has been set in a storage region

7   provided by a disk drive;

8   means for storing a correspondence between said logical ~~devices~~device and at

9   least one logical ~~units~~unit, said logical ~~units~~unit being a storage ~~regions~~region that ~~have~~has

10   been set logically;

11   means for assigning, when a first process command has been received for a first

12   logical unit to which no logical device has been assigned to said first logical unit, a first logical

13   device to ~~that~~said first logical unit and for performing processing with regard to ~~that~~said first

14   logical device; and

15   means for responding to said information processing device, when a second

16   process command that does not cause ~~a~~an input/output process with regard to a second logical

17   device has been received from said information processing device, by performing ~~a~~said second

18   ~~process corresponding to that~~process command without performing said logical device

19   assignment.

1   2.   (Canceled)

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1   3.   (Currently amended): A disk control system according to claim 1, further

2 comprising:

3   means for assigning a plurality of said logical devices to one of said logical units;

4 and

5   means for assigning to that logical unit only a number of said logical devices that

6 is necessary in order to perform the processing corresponding to said <u>first</u> process command.

1   4.   (Currently amended): A disk control system according to claim 1, further

2 comprising:

3   means for sending to said information processing device a message indicating that

4 said <u>first</u> process command cannot be processed, if there is no logical device that can be assigned

5 to said logical unit.

1   5.   (Currently amended): A disk control system according to claim 1, further

2 comprising:

3   means for sending to said information processing device a message indicating that

4 reading is impossible~~, if a process command requesting the reading of data from a logical unit to~~

5 ~~which no logical device has been assigned has been received from said information processing~~

6 ~~device~~.

1   6.   (Original): A disk control system according to claim 1, wherein said

2 information processing device is an open system computer.

1   7.   (Currently amended): A disk control system according to claim 1,

2 wherein said <u>first and second</u> process ~~command~~<u>commands</u> of the disk control system ~~is a~~<u>are</u>

3 SCSI ~~command~~<u>commands</u>.

1   8 and 9.   (Canceled)

1   10.   (Currently amended): A control method for a disk control system that

2   manages, as units, logical devices, which are logical storage regions that have been set in a

3   storage region provided by a disk drive, that stores a correspondence between said logical

4   devices and a plurality of logical units, said logical units being storage regions that have been set

5   logically, that receives a process command that has been sent from an information processing

6   device, and that performs processing with regard to a logical device corresponding to the logical

7   unit specified by that said process command, the control method comprising:

8   a first step of receiving a first process command for a first logical unit;

9   a second step of determining whether a first logical device has been assigned to

10   that said first logical unit; and

11   if in said second step a first logical device is assigned to said first logical unit, a

12   third step of performing with regard to that said first logical device a process corresponding to

13   said first process command, and, if in said second step no logical device is assigned to said first

14   logical unit, assigning a logical device to said first logical unit and performing with regard to that

15   said first logical device a process corresponding to said first process command;

16   a fourth step of receiving a second process command for a second logical unit;

17   a fifth step of determining whether a second logical device has been assigned to

18   said second logical unit; and

19   if no logical device has been assigned to said second logical unit and said second

20   process command is a command that does not cause an input/output process with regard to

21   second said logical device, performing second process command without assigning a logical

22   device to said second logical unit.

1   11.   (Previously presented): A control method for a disk control system that

2   manages, as units, logical devices, which are logical storage regions that have been set in a

3   storage region provided by a disk drive, that stores a correspondence between said logical

4   devices and logical units, said logical units being storage regions that have been set logically,

5   that receives a process command that has been sent from an information processing device, and

6   that performs processing with respect to a logical device corresponding to the logical unit

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7   specified by that process command, the control method comprising, when a process command

8   has been received for a logical unit:

9   if a logical device has been assigned to that logical unit, performing with regard to

10   that logical device a process corresponding to that process command;

11   if no logical device has been assigned to that logical unit and that process

12   command is a command that does not cause a process with regard to said logical device,

13   performing a process corresponding to that process command without assigning a logical device

14   to that logical unit; and

15   if no logical device has been assigned to that logical unit and that process

16   command is a command that causes a process with regard to said logical device, assigning a

17   logical device to said logical unit and performing with regard to that logical device a process

18   corresponding to that process command.